

Application Serial No. 10/551,276
Reply to Office Action of April 2, 2008

PATENT
Docket: CU-6541

RECEIVED
CENTRAL FAX CENTER
JUN 27 2008

Amendments to the Claims

The listing of claims presented below replaces all prior versions, and listings, of claims in the application.

Listing of claims:

1. (Previously Presented) A substrate for a liquid crystal display comprising at least a transparent substrate and a columnar spacer formed on the transparent substrate, wherein the substrate for a liquid crystal display is a following amount of an initial deformation A obtained by measuring the columnar spacer by a following measurement method is 0.04 μm or more, and a following amount of a plastic deformation B is 0.7 μm or less:

measurement method: a compression load is applied in a axial direction of the columnar spacer up to 80 mN at a load applying speed of 22 mPa/sec and that state is maintained for 5 seconds; thereafter, a load is removed down to 0 mN at a load removing speed of 22 mPa/sec, and that state is maintained for 5 seconds,

amount of initial deformation A: an amount of a compression deformation obtained by X-Y assuming that an initial height of the columnar spacer is X, and a height when a load F (mN) obtained by a following formula (1) is applied during an above load application is Y:

$$F=19.6/n \text{ (1)}$$

($10 \leq n \leq 50$, n is a density of a number of columnar spacers (pieces/mm²)).

amount of plastic deformation B: an amount of a residual deformation obtained by X-Z assuming that the initial height of the columnar spacer is X and a height after removing the load and maintaining that state for 5 seconds is Z.

2. (Previously Presented) The substrate for a liquid crystal display according to claim 1, wherein a following elastic deformation ratio C is 60% or more:

elastic deformation ratio C: a deformation ratio obtained by $[(Z-W)/(X-W)] \times 100$ assuming that the initial height of the columnar spacer is X; a height after applying a load of 80 mN and maintaining for 5 seconds is W; and a height after removing the load and maintaining for 5 seconds is Z.

3. (Previously Presented) The substrate for a liquid crystal display according

Application Serial No. 10/551,276
Reply to Office Action of April 2, 2008

PATENT
Docket: CU-6541

to claim 1 being used in a liquid crystal display of 17 inches or more.

4. (Previously Presented) The substrate for a liquid crystal display according to claim 2 being used in a liquid crystal display of 17 inches or more.

5. (Cancelled)

6. (Currently Amended) A liquid crystal display comprising wherein the substrate ~~for a liquid crystal display according to~~ of claim 1.

7. (Currently Amended) A liquid crystal display comprising wherein the substrate ~~for a liquid crystal display according to~~ of claim 2.

8. (Currently Amended) A liquid crystal display comprising wherein the substrate ~~for a liquid crystal display according to~~ of claim 3.

9. (Currently Amended) A liquid crystal display comprising wherein the substrate ~~for a liquid crystal display according to~~ of claim 4.